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THE TECHNOLOGY LAW OFFICES OF VIRGINIA

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Admitted to practice the District of Columbia a the Commonwealth of Virgi

Corporate, Patent & Trademark, Computer & Software, Licensing & Joint Venture Law; Venture Capital Employment Law

Honorable Commissioner of Patents & Trademarks U. S. Patent & Trademark Office 2011 So. Clark Place Crystal Plaza 2, Room 1 BO 3 Mail Room Arlington, VA 22202

March 1, 2002

Re: New Continuation-In-Part for "Synfuel Composition and Method of Using Same.

Dear Sir,

Enclosed please find the following documents pertaining to the above case.

- *23 pages of specification
- *44 claims on 5 pages
- *A check for \$691.00 representing the charge (\$216.00) for 24 excess total claims and the charge (\$120.00) for three excess independent claims as well as the base filing fee of \$355.00.
- *Six drawing figures on 6 sheets
- *An abstract on a separate sheet.
- *An execute. Jeclaration and power of attorney by the inventor
- *A form 1449
- * Two one page reports by Combustion Resources of Provo, Utah on the additive.

The applicant is a small entity and the fees paid reflect that accordingly.

Should the to be any questions concerning the case please contact the undersigned. the attorney of record.

Respectfully submitted,

James W. Hiney, Esq. Reg. No. 24, 705

Certification of Mailing

James W. Hiney



Mr. Robert S. Vogt Power Fuel Partners MESI Fuel Station #1 LLC 1150 West 8th Street Suite 270 Cincinnati, OH 45203 (513) 721-2009

February 6, 2002

Dear Mr. Vogt:

At your request we have completed analytical testing on samples of parent coal, J-316 chemical change agent, and synthetic fuel product from KWT, Test #020125-1, dated January 25, 2002 for the purpose of identifying significant chemical changes in the product relative to the feed materials. The fuel product was made by combining 0.25% J-316 agent with the parent coal. Portions of the parent coal, chemical agent, and fuel product were examined using Fourier transformed infrared (FTIR) analysis, thermo-gravimetric analysis (TGA), ASTM proximate analysis, and heating value determination. Comparison of analysis results of the product sample and a simple mass-weighted mixture of the parent ingredients was performed to determine similarities and differences.

FTIR analysis indicates that chemical changes may have occurred in some of the functional groups found in the coal. Significant differences in the spectral characteristics of IR peaks representing aliphatic CH, carbonyl groups, carbon-oxygen bonding, others, ester, alkenes, aldehydes, and in the polycyclic aromatic skeletal structure are noted. An average difference in measured peak areas using FIIR of 20% provides evidence of an overall significant change in chemical composition between the parent materials and fuel product.

TGA results indicate that peak pyrolysis rates of mass loss are significantly different (26.4%) for the fuel product and simple mixture of parent ingredients. This provides additional evidence of significant chemical change in the fuel product.

Good correlation between the levels of ash and sulfur for the parent feed and product, obtained from proximate analysis results, suggests that no significant processing or sampling errors likely occurred with the collection of these samples. This indicates that these samples are representative and useful for this analysis.

In summary, FTIR and TGA results of Test #020125-1 parent coal, J-316 chemical agent, and fuel product provide evidence that significant chemical changes have taken place in the fuel product relative to the parent materials.

Sincerely.

Craig Eatough, Ph.D.

Senior Manager

Scott C. Hill, Ph.D. Fuels Analysis Manager





February 6, 2002

Mr. Robert S. Vogt
Power Fuel Partners
MESI Fuel Station #1 LLC
1150 West 8th Street Suite 270
Cincinnati, OH 45203
(513) 721-2009

Dear Mr. Vogt:

At your request we have completed analytical testing on samples of parent coal, J-316 chemical change agent, and synthetic fuel product from KWT, Test #020125-2, dated January 25, 2002 for the purpose of identifying significant chemical changes in the product relative to the feed materials. The fuel product was made by combining 0.20% J-316 agent with the parent coal. Portions of the parent coal, chemical agent, and fuel product were examined using Fourier transformed infrared (FTIR) analysis, thermo-gravimetric analysis (TGA), ASTM proximate analysis, and heating value determination. Comparison of analysis results of the product sample and a simple mass-weighted mixture of the parent ingredients was performed to determine similarities and differences.

FITR analysis indicates that chamical changes may have occurred in some of the functional groups found in the coal. Significant differences in the spectral characteristics of IR peaks representing carbonyl groups, ethers, ester, alkenes, aldehydes, and in the polycyclic aromatic skeletal structure are noted. An average difference in measured peak areas using FTIR of 16% provides evidence of an overall significant change in chemical composition between the parent materials and fuel product with supporting evidence from other test results.

TGA results indicate that peak pyrolysis rates of mass loss are significantly different (36.6%) for the fuel product and simple mixture of parent ingredients. This provides additional evidence of significant chemical change in the fuel product.

Proximate analysis results show that the difference in fixed carbon and volatiles contents between the fuel product and simple ingredients mixture (1.41%) are significantly different. This provides additional evidence of significant chemical change in the fuel product. Good correlation between the levels of ash and sulfur for the parent feed and product, obtained from proximate analysis results, suggests that no significant processing or sampling errors likely occurred with the collection of these samples. This indicates that these samples are representative and useful for this analysis.

In summary, FTIR, TGA, and proximate analysis results of Test #020125-2 parent coal, J-316 chemical agent, and fuel product provide evidence that significant chemical changes have taken place in the fuel product relative to the parent materials.

Sincerely.

Craig Eatough, Ph.D. Senior Manager Scott C. Hill, Ph.D. Fuels Analysis Manager

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